

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/631,302	CHRISTIAN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Patricia L. Hailey	1755	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**  
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an Amendment after Final Rejection, filed December 5, 2005.
2. ☒ The allowed claim(s) is/are 1-9 and 40-45.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |  |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

Applicants' Amendment after Final Rejection, filed on December 5, 2005, has been made of record and entered. With the entry of this amendment, claims 1, 5, and 6 have been amended. No claims have been canceled; claims 1-9 and 40-45 remain pending in this application.

Support for the amendments to claims 1, 5, and 6, can be found in the Examples of the Specification.

#### *Withdrawn Rejections*

The 102(b) rejection of claims 1-9 and 40-45 as being anticipated by Savadogo et al. (U. S. Patent No. 5,298,343), stated in the Final Rejection, has been withdrawn in view of Applicants' amendments to claims 1, 5, and 6.

The reference teaches electrocatalysts comprising a metallic component (selected from the group consisting of palladium, platinum, ruthenium, rhodium, iridium, and osmium) dispersed on a suitable conductive carrier (e.g., carbon), and a chemical component (selected from the group consisting of tungstic acid, molybdic acid, ammonium tungstate, ammonium molybdate, sodium tungstate, and sodium molybdate). The metallic component is dispersed on the conductive carrier, and the chemical component is admixed therewith.

Applicants' claims in their present form recite the limitation "consisting of"; the claims no longer permit the presence of additional components, whether specified or not.

The transitional phrase "consisting of" excludes any element, step, or ingredient not specified in the claim. In re Gray, 53 F.2d 520, 11 USPQ 255 (CCPA 1931); Ex parte Davis, 80 USPQ 448, 450 (Bd. App. 1948) ("consisting of" defined as "closing the claim to the inclusion of materials other than those recited except for impurities ordinarily associated therewith.").

### *Allowable Subject Matter*

1. Claims 1-9 and 40-45 are allowed.

### *Conclusion*

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Marucchi-Soos et al. (U. S. Patent No. 5,922,488) and Mund et al. (U. S. Patent No. 3,784,412) each disclose the employment of ammonium tungstate, tungstic acid, and/or sodium tungstate in the production of electrodes; however, in these references, either **elemental tungsten, tungsten carbide, or tungsten sulfide** is obtained as the final product in Patentees' electrodes.

Christian et al. (U. S. Patent No. 6,696,184) teach a supported **tungsten carbide** material, formed on a support by reacting a mixture of a tungsten precursor and high surface area support in flowing hydrocarbon and, optionally, hydrogen gases at a

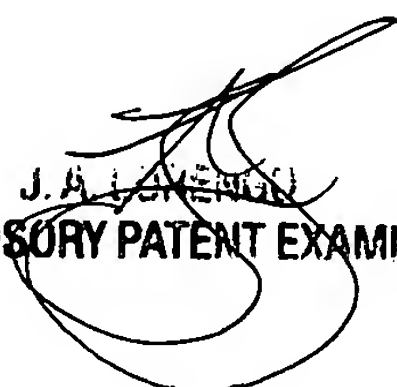
Art Unit: 1755

temperature of from about 500°C to about 800°C, said precursors among those instantly claimed.

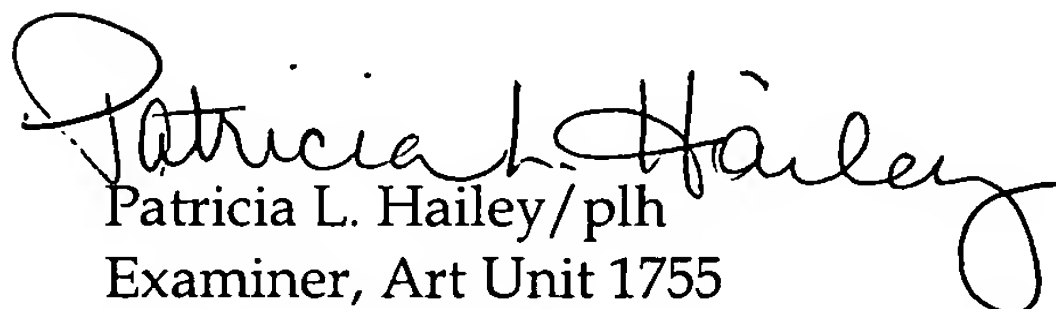
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

  
J. A. LORENZO  
SUPERVISORY PATENT EXAMINER

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Patricia L. Hailey/plh  
Examiner, Art Unit 1755  
December 12, 2005